

PART 1.PROJECT PURPOSE & NEED

PROJECT PURPOSE

The purpose of the Laveen Area Drainage Master Plan (ADMP) is to quantify the extent of local flooding problems and to identify pertinent information necessary to investigate and evaluate alternative solutions to these flooding problems. Arizona Revised Statutes Title 48, Chapter 21 requires the Flood Control District of Maricopa County (FCDMC) Board of Directors to identify flood control problems and plan for the construction of facilities that will eliminate or minimize flooding problems.

There are two major objectives of the study. The first is to develop a plan to control stormwater runoff to prevent flood damage within the watershed. The second is to mitigate future potential runoff and subsequent ponding and to provide protection to properties from future 100-year flood damages.

PROJECT NEED

Pending development has increased significantly within the watershed, creating the need to evaluate potential flooding and ponding particularly along the Maricopa Drain alignment. Area floodplain/drainage managers, developers and municipalities will be able to use this study as a basis for locating, sizing and designing future drainage facilities.

This study is expected to identify conceptual flood control features and/or measures for the study area to reduce potential damages to property or loss of life from runoff from storm events. Features or measures identified in this planning effort may be implemented together, individually or not at all, based on scheduling, funding and cost sharing.

PROJECT PARTICIPATION

The participation of both public and private parties is an important aspect of this project. The ADMP will only be successful if these parties feel that their interests would benefit from its implementation. Therefore, the community, developers, local municipalities, County, and other agencies were encouraged to provide input and assist in collectively developing a community-based plan, capable of being implemented.

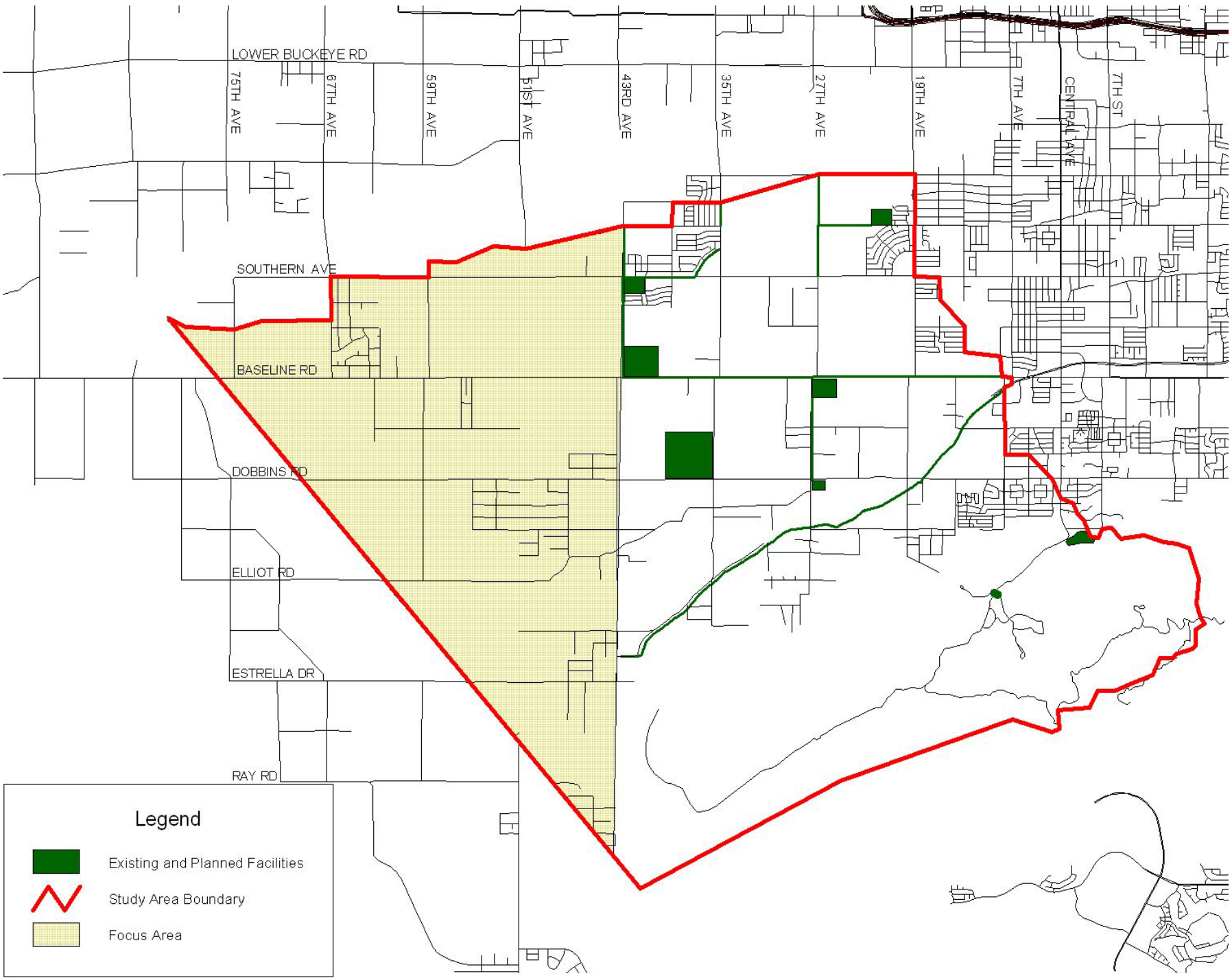


Figure 1-1: Laveen ADMP Study Area

INTERAGENCY COORDINATION

Agencies cooperating in the preparation of the ADMP have included:

- Arizona Department of Transportation
- Gila River Indian Community
- Maricopa County Department of Transportation
- Maricopa County Planning Department
- City of Phoenix
- Salt River Project

SPECIAL INTEREST GROUPS

In addition to governmental agencies, several special groups have cooperated in the collection of data, formulation of alternatives, and development of the preferred alternative. They include:

- Laveen Village Planning Committee
- Laveen Citizens Concerned for Growth
- Laveen School District

PUBLIC INVOLVEMENT

Several tools have been used to assure that the general public has the opportunity to participate in the planning process. Through the use of open-house meetings, direct mailings, brochures, newsletters, and a project website (www.laveenadmp.com) the needs and desires of the community have been expressed and incorporated into the planning process.

PROJECT OVERVIEW & HISTORY

The Laveen area has suffered numerous occurrences of flood damage during the recent past. These events have generally been the result of one of two circumstances. Either excessive amounts of stormwater have caused local ponding to elevations that inundate property, due to inadequate conveyance, or flows in the previous Maricopa Drain, the major outfall for the Laveen Area, have exceeded the capacity of the drain causing flooding.

Historically, flooding has occurred in the Laveen area causing damage to private property as was experienced by residents in July of 1999 (Figure 1-2).



Figure 1-2: July 1999 flood

Because of impending future development, the FCDMC has initiated efforts to mitigate current and future flooding potential. The Laveen Area Conveyance Channel Project (Conveyance Channel) will realign and increase the hydraulic capacity of the previous Maricopa Drain. The Conveyance Channel will be considered an existing condition for purposes of this study.

PROJECT OVERVIEW

The FCDMC initiated this study in the fall of 2000 to develop an area drainage master plan (ADMP) for the Laveen area to identify drainage problems and develop cost-effective solutions for a storm water collection and disposal system. The scope of this effort includes public information and coordination, hydrology, hydraulics, identification of drainage problems, development of alternative solutions, and preparation of preliminary design and plans based on a preferred alternative.

PROJECT LOCATION

The Laveen ADMP study area is located in the southwestern portion of the metropolitan Phoenix area in Maricopa County, Arizona

(Figure 1-1). The 39-square mile study area is within the City of Phoenix and unincorporated Maricopa County.

The ADMP study boundaries are the Salt River on the north, approximately 7th Avenue on the east, South Mountain Park on the south, and the Gila River Indian Reservation on the west. The impact of flooding from flows in the Salt River is not covered as a part of the ADMP.

The focus area for the ADMP is the 16 square miles west of 43rd Avenue. A previous study, the Laveen Area Drainage Master Study (ADMS), included about 23 square miles of the study area west of 43rd Avenue.

PROJECT HISTORY

Several previous studies have been conducted in the study area. These studies provided background information and also hydrologic and hydraulic models and data used in the study analyses. The studies include:

- South Phoenix/ Laveen Drainage Improvement Project (HDR Engineering, Inc., July, 1997)
- Laveen Area Master Drainage Study (Cella-Barr Associates, September, 1991)
- Laveen Land Use Plan (Maricopa County, April, 1992)
- Dysart Drain Improvement Project (The WLB Group, Inc., June 1993)
- Champion Flood Prevention RC&D Measure (FCDMC & SCS, September, 1976)

PROJECT AUTHORIZATION

This project was authorized pursuant to a contract between the FCDMC and HDR Engineering, Inc. (HDR). The authorizing agreement is Contract FCD 2000C001 dated August 9, 2000. The FCDMC issued a notice-to-proceed to HDR on August 14, 2000. The scheduled completion date for the ADMP study is October 13, 2001.